U.S. Department of Defense Unmanned Aerial Vehicles Master Plan

High-Level Attention

- **U.S. Secretary of Defense Cohen's Memo (July 6,1999)**
  - **Spiral development, accelerated fielding, Predator operational capability, resources for fielded systems, incentives for UAV units, engage allies, shorten production timelines**
- **Senate Authorization Bill**
  - **Supports aggressive pursuit of unmanned combat systems**
- **Opportune time to review current and future UAV planning**
- **Culture more receptive**

A Consolidated Department-level UAV Master Plan is needed

Need for UAVs

- Kosovo validated our plan for a family of UAVs
  - No single UAV can fulfil all our requirements
- High expectations for combat outcome
  - Achieve information superiority
  - Minimize civilian casualties and collateral damage
  - Fight effectively in urban areas against widely-dispersed forces
  - Strike precisely
- As precision guided weapon use increases, so will intelligence and targeting support needs
  - Expect UAVs to help fill these needs
  - Must manage our scarce resources (UAVs, as well as manned platforms)

Consolidated UAV Master Plan

- Service-specific UAV plans are very good
- Advantages of a consolidated Master Plan
  - Identify opportunities for jointness, interoperability, expanded vision
  - Potentially avoid some funding hurdles inherent in the Service prioritization process
- Process led by offices of USD(AT&L) and ASD(C3I)
  - Task force includes Military Departments, Joint Staff, Defense Agencies, and Joint Forces Command
- Schedule
  - UAV Master Plan completed by October 2000

Consolidated UAV Master Plan Content

- **Executive Summary -- includes time phasing and relationships**
- **Operational & Programmed Platform Details**
- **Requirements -- firm foundation for future.**
  - **JROC validated Mission Prioritization List**
- **Technologies -- UAV-related S&T efforts and analyses of technology trends**
- **Operations -- Experimentation/Demos/Battle Labs/M&S facilities**
- **Key Issues -- technical, programmatic, political, regulatory, & operational**
- **Recommendations**

Future Based on Requirements

- **Because funds are limited, our plans must be rooted in valid warfighting requirements**
- **Joint Staff led an update of the UAV Mission Priority List**
  - **Previous version dated 1997**
  - **Consolidated inputs from the unified Commander-in-Chiefs (CINCs) to formulate a UAV mission priority list**
  - **Took the consolidated list through the Joint Requirements Oversight Council (JROC) process for validation**
- **Prioritized missions logically lead to payloads, sensors, and technology efforts**

2000 CINC-Generated UAV Mission Priority List

Mission	Predator	Global Hawk	TUAV	VTUAV
Reconnaissance	1	1	1	1
Signals Intel	3	2	7	4
Mine Countermeasures	7	12	4	5
Target Designation	2	11	3	2
Battle Management	8	7	5	7
Chem/Bio Reconnaissance	10	10	6	9
Counter Cam/Con/Deception	4	5	8	11
Electronic Warfare	6	4	9	10
Combat SAR	5	8	10	8
Communications/Data Relay	9	3	2	3
Information Warfare	11	6	11	6
Digital Mapping	12	9	12	12

Littoral Undersea Warfare as a mission area for VTUAV……..…….13

After the Plan….

Challenges remain--

- Managing budget priorities
- Streamlining the acquisition process
  - Spiral Development & Evolutionary Acquisition
- Overcoming organizational/cultural resistance
- Balancing cost and requirements
- Ensuring resources for demos, exercises, and experimentation to develop doctrine, tactics, and train
- Processing information
- Designing in interoperability

Summary

- **UAVs have demonstrated their capabilities beyond our original plans**
- **High-level leadership and a firm requirements base support a future vision for UAVs**
- **Preparation of the Master Plan is nearing completion. However, executing the Plan is the most important part of the effort.**
- **Formidable challenges exists, but "precision strike" is our standard for combat**

UAVs are a critical tool for achieving our goal